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PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/523,960
Applicant : David Tilbrook et al.
Filed : February 7, 2005
For : SUPERCONDUCTING QUANTUM INTERFERENCE DEVICE
Group Art Unit : Unassigned
Examiner : Unassigned
Docket No. : 10554/10
Customer No. : 23838

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 CFR § 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom. The filing of this Information Disclosure Statement and the enclosed PTO Form No. 1449, shall not be construed as an admission that the information cited is prior art, or is considered to be material to patentability as defined in 37 C.F.R. § 1.56(b). The paragraphs marked below are applicable. It is believed that no fees other than those indicated below are due, but authorization is hereby given to charge any additional fees due, or to credit any overpayment, to deposit account 11-0600.

☒ 1. This Information Disclosure Statement is being filed (a) within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. § 1.53(d), (b) within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, (c) before the mailing date of a first Office

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Information Disclosure Statement filed 12/16/2005

Action on the merits in the present application, OR (d) before the mailing of a first office action after filing of a request for continued examination. No certification or fee is required.

☐ 2. This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a final action, Notice of Allowance, or any action that otherwise closes prosecution.

☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1).

☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).

☐ c. Please debit Deposit Account No. 11-0600 in the amount of \$180.00 in payment of the fee under 37 CFR §1.17(p) to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached. 37 CFR §1.97(c)(2).

☐ 3. This Information Disclosure Statement is being filed after the mailing date of a final action, Notice of Allowance or an action that otherwise closes prosecution, but before payment of the Issue Fee. Applicant(s) hereby request(s) that the Information Disclosure Statement be considered. Please debit Deposit Account No. 11-0600 in the amount of \$180.00 in payment of the petition fee under 37 CFR §1.17(p) to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached.

☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1).

☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).

☐ 4. Relevance of the non-English language reference(s) is discussed in the present specification.

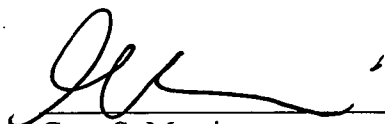
☐ 5. The reference(s) was/were cited in a counterpart foreign application. An English language version of the foreign search report is attached for the Examiner's information.

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Information Disclosure Statement filed 12/16/2005

- ☐ 6. A concise explanation of the relevance of the non-English language reference(s) appears in the Appendix attached hereto.
- ☐ 7. The Examiner's attention is directed to co-pending U.S. Patent Application No. _____, filed, which is directed to related technical subject matter. The identification of this U.S. Patent Application is not to be construed as a waiver of secrecy as to that application now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited application and the art cited therein during examination of the present application.
- ☐ 8. This application is one of a series of related applications, identified in the attached Appendix, which are directed to related technical subject matter. The identification of those U.S. Patent Applications is not to be construed as a waiver of secrecy as to those applications now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited applications and the art cited therein during the examination.
- ☐ 9. The reference(s) was/were cited by or submitted to the Office in parent application No. _____, filed _____, which is relied upon for an earlier filing date under 35 U.S.C. §120. Thus, copies of these references are not attached. 37 CFR §1.98(d).
- ☒ 10. English-language Abstracts of the non-English language references are attached hereto.
- ☒ 11. The documents were cited in a Supplementary European Search Report (copy attached) mailed October 25, 2005 from the European Patent Office in the corresponding European patent application.

Respectfully submitted,

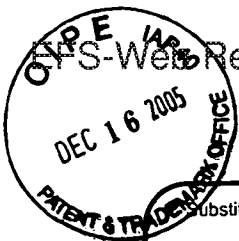
KENYON & KENYON



Gary S. Morris
Registration No. 40,735

Date: 16 December 2005

Kenyon & Kenyon
1500 K Street, N.W.
Washington, D.C. 20005
Telephone: (202) 220-4200
Facsimile: (202) 220-4201



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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet

of

Complete if Known

Application Number	10/523,960
Filing Date	August 7, 2003
First Named Inventor	David Tilbrook et al.
Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	10554/10

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
		US-4,982,157	01-01-1991	Seifert	
		US- 5,442,289	08-15-1995	Dilorio et al.	
		US- 5,469,058	11-21-1995	Dunnam	
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FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
		JP 04125981	04-27-1992	Fujitsu Ltd.		abstract
		EPO 0 583 640 A1	02-23-1994	Tsukada		
		DE 199 48 618 A1	05-17-2001	Daalmans		
		WO 00/57200	09-28-2000	Farrell et al.		

Examiner
Signature

/Bot Ledynh/

Date
Considered

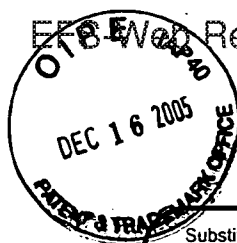
04/13/2008

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Application Number	10/523,960
Filing Date	August 7, 2003
First Named Inventor	David Tilbrook et al.
Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	10554/10

NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		S. KUMAR et al., "Nuclear magnetic resonance using a high temperature superconducting quantum interference device," 2/24/97 pp. 1037-1039, J. Appl. Phys. Lett. Vol. 70 No. 8, 1997 American Institute of Physics.	
		K. CHEN et al., "High-T _c SQUID magnetometer and planar gradiometer and their applications in non-destructive evaluation," PHYSICA C 341-348 (2000) 2709-2710.	
		F.P. MILIKEN et al., "The response of high-T _c SQUID magnetometers to small changes in temperature," 12/15/97, pp. 6301-6305, J. Appl. Phys. Vol. 80 No. 12, 1997 American Institute of Physics.	
		Y. ZHANG et al., "A design of planar multi-turn flux transformers for radio frequency SQUID magnetometers," 4/20/98, pp. 2029-2031, Applied Physics Letters Vol. 72 No. 16, 1998 American Institute of Physics.	
		A.D. HIBBS et al., "A high-resolution magnetic imaging system based on a SQUID magnetometer," 7/92, pp. 3652-3658, Rev. Sci. Instrum. Vol. 63 No. 7, 1992 American Institute of Physics.	
		J. CLARKE, "SQUIDS (for superconducting quantum interference devices) are the most sensitive detectors of magnetic fields. Their applications range from diagnosis of brain tumors to tests of relativity," 8/94, pp. 36-43, Scientific American 8/1994.	
		H.E. HOENIG et al., "MULTICHANNEL DC SQUID SENSOR ARRAY FOR BIOMAGNETIC APPLICATIONS," 3/91, pp. 2777-2785, IEEE Transactions on Magnetics, Vol. 27 No. 2, March 1991.	
		Y.A. TAVRIN et al., "Two-hole bulk high T _c SQUID electronic gradiometer for magnetocardiography in unshielded space," 7/93, pp. 719-723, Cryogenics 1993 Vol. 33, No. 7.	
		K. ENPUKU et al., "Progress in High T _c Superconducting Quantum Interference Device (SQUID) Magnetometer," 1/2000, pp. 34-43, IEICE TRANS. ELECTRON., Vol. E83-C, No. 1, January 2000.	
		S. KNAPPE et al., "A planar YBa ₂ Cu ₃ O ₇ gradiometer at 77 K," 4/13/92, pp. 881-884, Cryogenics 1992 Vol. 32, No. 10.	
		G.M. DAALMANS, "HTS DC SQUIDS FOR PRACTICAL APPLICATIONS," 1995, pp. 399-423, Applied Superconductivity Vol. 3, No. 7-10, 1995, Great Britain.	

Examiner Signature	/Bot Ledyneh/	Date Considered	04/13/2008
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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